

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/499,638 02/08/00 LEHMANN

P 105396

MMC2/1012

Cliff & Berridge PLC
P O Box 19928
Alexandria VA 22320

EXAMINER

WEBB, B

ART UNIT

PAPER NUMBER

2839

DATE MAILED:

10/12/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)
	09/499,638	
	Examiner	LEHMANN, PIERRE
	Brian S. Webb	Art Unit 2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 February 2000 is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - a) All b) Some * c) None of the CERTIFIED copies of the priority documents have been:
 1. received.
 2. received in Application No. (Series Code / Serial Number) _____.
 3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

15) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
17) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3,4</u> .	20) <input type="checkbox"/> Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figures 1A, 1B, 1C, and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the male element, the connector (claim 18), the component (claim 19), and the printed circuit board (claim 20) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

The following order or arrangement is preferred in framing the specification and, except for the reference to "Microfiche Appendix" and the drawings, each of the lettered items should appear in upper case, without underlining or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) Title of the Invention.
- (b) Cross-References to Related Applications.
- (c) Statement Regarding Federally Sponsored Research or Development.
- (d) Reference to a "Microfiche Appendix" (see 37 CFR 1.96).
- (e) Background of the Invention.
 - 1. Field of the Invention.
 - 2. Description of the Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) Brief Summary of the Invention.
- (g) Brief Description of the Several Views of the Drawing(s).
- (h) Detailed Description of the Invention.
- (i) Claim or Claims (commencing on a separate sheet).
- (j) Abstract of the Disclosure (commencing on a separate sheet).
- (k) Drawings.
- (l) Sequence Listing (see 37 CFR 1.821-1.825).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Brush, Sr. et al (US 4,461,530) in view of Spinnato (US 5,322,459).

Brush, Sr. et al discloses, in figures 1 and 2, a contact piece comprising:

- A contact piece that is a female type and able to bear crimping (column 1, line 65 – column 2, line 65)
- a contact clip with fingers at an angle α included in said female portion and that engage a male element in an elastic manner
- a tube shaped bushing (14) encircling said contact piece and with a passage opening at a free end and a cylindrical rear portion fastened on a neck (42) of said contact piece
- the diameter of said passage preventing male elements of too great a diameter from engaging said contact piece of female type (figure 2)
- a contact piece and clip that are formed of different materials (column 1, lines 33-39)
- said contact piece can be fitted to a connector or component (column 1, lines 10-15)

Brush, Sr. et al does not disclose an arched portion on the free end of said fingers, that said arched portions will not contact said contact or bushing limits when a male element of said diameter is engaged, an explicit angle α between 4 and 10 degrees or 6 and 8 degrees, a contact piece of brass or a brass alloy, a clip that is an alloy of bronze and beryllium, that said contact piece explicitly complies with the norm MIL-C-39029, or the contact piece fitted to a printed circuit board.

Spinnato discloses, in figures 1-10, an arched portion on the free end of said fingers, that said arched portions will not contact said contact or bushing limits when a male element of said diameter is engaged (see figures 1 and 7, reference M). It would

have been obvious to one of ordinary skill in the art at the time the invention was made to combine the non-contacting arched portions disclosed by Spinnato with the contact piece disclosed by Brush, Sr. et al. The motivation for doing so being the improved reliability, useful life, and magnitude of insertion/extraction force taught by Spinatto (column 1, lines 59-64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the contact piece with fingers at an explicit angle α between 4 and 10 degrees or 6 and 8 degrees, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Official notice is taken that it is well known in the art to use a contact piece of brass or a brass alloy and to form clips out of an alloy of bronze and beryllium. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a contact piece of brass or a brass alloy and to use a clip of bronze beryllium alloy. Especially since both references teach the use of a copper beryllium alloy for said clip.

Official notice is taken that it is well known in the art to that said contact piece explicitly complies with the norm MIL-C-39029. In the initial paragraphs of the instant application, in what is presumed to be a presentation of related and background art, it states that MIL-C-39029 defines limitations that all contact pieces must comply with, page 1, lines 11-15.

Official notice is taken that it is well known in the art to the contact piece be fitted to a printed circuit board. It would have been obvious to one of ordinary skill in the art at the time the invention was made to fit the contact disclosed by Brush, Sr. et al with a printed circuit board due to the vast commercial demand for said fittings.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Locati (US 4,685,761) and Goodman et al (US 5,897,404) also disclose contact pieces that read on many of the limitations in the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian S. Webb whose telephone number is (703) 308-6080. The examiner can normally be reached on 7: 30-6, Mon - Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Stephan can be reached on (703) 308-2826. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Art Unit: 2839

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

BSW

BSW
October 6, 2000

[Signature]
LAWRENCE CROWAN
PRIMARY EXAMINER
GROUP 2100